

SECTION A

1. Multiply: 0.4×0.2 .

Solution

$$0.4 \times 0.2$$

$$\frac{4}{10} \times \frac{2}{10} = \frac{8}{100} = 0.08$$

2. Subtract $(2x - 4)$ from $(5x - 4)$

$$\begin{aligned} &= (5x - 4) - (2x - 4) \\ &= 5x - 4 - 2x + 4 \\ &= 5x - 2x - 4 + 4 \\ &= 3x \end{aligned}$$

3. Find the value of the exterior angle of a regular hexagon.

Soln

Hexagon = 6 side

$$\begin{aligned} \text{Exterior } \angle &= \frac{360}{n} \\ &= \frac{360}{6} \\ &= 60^\circ \end{aligned}$$

4. Two numbers, 27 and 36 have a Lowest Common Multiple (LCM) of 108. Find their GCF.

$$\begin{aligned} \text{LCM} \times \text{GCF} &= 1^{\text{st}} \text{ No.} \times 2^{\text{nd}} \text{ No.} \\ 108 \times \text{GCF} &= 27 \times 36 \\ \text{GCF} &= \frac{27 \times 36}{108} \end{aligned}$$

$$\begin{array}{r} 108 \overline{) 972} \\ 108 \overline{) 972} \\ \hline 0 \end{array}$$

5. The average weight of 5 boys is 48kg. When a sixth boy joins them average weight becomes 45kg. What is the weight of the sixth boy?

5 boys

$$Av = \frac{\text{Sum}}{N}$$

$$48 = \frac{\text{Sum}}{5}$$

$$\text{Sum} = 48 \times 5$$

$$\text{Sum} = 240 \text{ kg}$$

6 boys

$$Av = \frac{\text{Sum}}{N}$$

$$45 = \frac{\text{Sum}}{6}$$

$$\text{Sum} = 45 \times 6$$

$$= 270 \text{ kg}$$

Sixth boy

$$= 270 - 240$$

$$= 30 \text{ kg}$$

6. The Perimeter of an equilateral triangle is 36cm. If one side is $(x+8)$ cm, find the value of x.

All sides are equal

$$P = s + s + s$$

$$36 = x + 8 + x + 8 + x + 8$$

$$36 = 3x + 24$$

$$3x + 24 - 24 = 36 - 24$$

$$3x = 12$$

$$x = 4$$

7. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 75° in the space below.

8. During a debate, each side gave 20 views. If the secretary was awarding 3 points for every defended view and deducting a point for every opposed view. How many views did the proposers defend if their final score was 72 points?